

# THE EUGENICS REVIEW

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*Editorial Offices:* The Eugenics Society  
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"*Eugenics is the science which deals with all influences that improve the inborn qualities of a race; also with those that develop them to the utmost advantage.*"—Sir Francis Galton, 1904.

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## NOTES OF THE QUARTER

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### ***Morbidity and Mortality in the First Year of Life***

WHILST a wealth of information regarding the social class gradients of infant mortality can be derived from the reports of the Registrar General, information regarding social class gradients of infant sickness is but scanty. Douglas (1951) based a study of the problem on children born in only one month of one year (March, 1946) Dykes, Grundy and Lewis-Faning (1953) studied it on infants born in only one area (Luton), and Spence *et alia* (1954) also based a study of it on only one area (Newcastle-upon-Tyne) and on the births in only two months of one year (May and June 1947). A new book\* on morbidity and mortality in the first year of life, among other things, contributes to

\* Grundy, Fred and Lewis-Faning, E. (Editors) *Morbidity and Mortality in the First Year of Life: A Field Enquiry in Fifteen Areas of England and Wales*. London, 1957. The Eugenics Society Pp. 145. Price 18s.

It is hoped to publish a full review of this book in the April 1958 number of THE EUGENICS REVIEW—EDITOR.

this problem. It recounts a survey based on all the births in fifteen areas of England and Wales in 1952 (approximately 21,000) followed up to their first anniversary. It is edited by Professor F. Grundy and Dr. E. Lewis-Faning, sponsored by the *Eugenics Society*, and contains a foreword by our President, Sir Charles Darwin.

The picture of infant mortality in these combined areas closely resembled that for England and Wales in the same period. The infant *mortality* rate from all causes (1951-53) was 28.8 per 1,000 live births. The Social Class gradient, expressed as percentages of the relevant rates for all classes, ranged from 64 per cent of this figure in Social Class 1 to 136 per cent in Social Class 5, and to 264 per cent amongst illegitimate births.

The average number of spells of *sickness* during the first year of life was 96 per 100 infants. Respiratory diseases accounted for approximately one half of these. Sickness from all causes showed a considerable social gradient, ranging from 68 per cent of the average figure (Social Class 1) to 112 per cent (Social Class 5), this gradient being almost wholly attributable to the respiratory diseases and the infectious diseases.

Various environmental and biological factors—standard of housing, standard of maternal care, birth weight, size of family, and parents' educational status—were examined as to the contribution of each to the social class gradient, and it was found that maternal care and birth weight were the main contributory factors to the social class gradient of mortality. Maternal care was also an important factor in the gradient of morbidity, as were housing and parental educational status, but *not* birth weight.

Nevertheless, when allowance was made for the effect of all the factors considered, a considerable part of the gradient of both mortality and morbidity remained unaccounted for.

Separate analyses of neonatal and post-neonatal morbidity and mortality are presented, but space does not permit a discussion of them in this note.

It was possible to contrast certain groups of infants with high and low sickness rates and other groups with high and low mortality rates. To take two examples: first, the sickness rates for infants in bad houses and having bad maternal care were as high as 107 per 100 children, as against only 71 per 100 children in not bad houses and enjoying superior maternal care; second, infants who were non-immature and whose mothers gave a superior care standard had, in Social Classes 1 and 2 combined, an infant mortality rate as low as 4.5 per 1,000 live births, as against an overall rate of 28.8 per 1,000. On the other hand, there was no consistent association between the level of the infant mortality rate and the level of the sickness rate in the different areas, i.e., some areas with high sickness rates did not have high infant mortality, and conversely.

The contribution of selected diseases to the total amount of sickness and the sickness gradient for each disease group is studied. The report also includes a chapter by Dr. C. O. Carter on the congenital malformations recorded. In his conclusions, Dr. Carter writes: "inasmuch as these conditions are genetic in origin, an increased survival rate to reproductive age of babies with the conditions will (unless accompanied by a limitation of family size) increase the number of carriers in the population, and ultimately the prevalence of the manifest conditions. Nor should it be forgotten that the improved survival rates of sufferers from serious congenital malformations will add, in some degree, to the burden of medical and social care which must be provided during the school years and in adult life."

Immaturity and the acute respiratory diseases have been singled out for special consideration and an entire chapter has been

devoted to each. The respiratory diseases accounted for one-half the spells of sickness in infancy, and were the biggest single cause of death in the post-neonatal period.

The main questions dealt with in the final review of the findings are: (1) the possible ways of further reducing infant mortality suggested by the inquiry, and (2) the question of area differences as a means of identifying a possible genetic component in infant sickness. In addition, there is a brief comment on the subject of social class differences and, finally, a number of practical suggestions as to administrative and future research policies.

### **The Wolfenden Report\***

MR. CECIL BINNEY writes: The Wolfenden Committee had imposed on it the difficult task of investigating and making recommendations on two separate subjects, homosexual offences and prostitution. These are logically connected, in that they both involve consideration of the law as to sexual offences and both concern forms of sexual indulgence by males which do not result in the birth of children, and they overlap in that there are boy prostitutes, though few compared with female prostitutes. But the matters to be considered in the two parts of their enquiry, when one advances beyond the most general principles, are entirely different and must be treated separately.

The most controversial question the Committee had to answer was, whether there should be a change in the present law by which any sexual act between male persons is criminal, irrespective of its circumstances—a question which, as they point out, affects a very large number of male persons at some stage of their lives. These persons are not confined to any particular section of the population nor are they of any uniform level of intelligence, most of them are not, in other respects, abnormal mentally or physically or of criminal character, and a large number of them are not exclusively homosexual.

\* *Report of the Committee on Homosexual Offences and Prostitution*. Cmd. 247. London, 1957. H.M. Stationery Office. Pp. 155. Price 5s.

The Committee recommend that in accordance with the general principle of English law, which does not attempt to enforce sexual morality as such, homosexual acts should not be illegal, provided that there is complete consent, that there is no public indecency and no corruption of youth. This last point raises an almost insuperable difficulty; obviously, the law must suppress sexual interference with young boys, but it is not easy, as in the case of offences against girls, to lay down a satisfactory age of consent. The Committee fix this at sixteen, which is probably as good an age as can be selected; but they also make the extraordinary suggestion that homosexual acts should only be legalized, when done by adults over twenty-one. This means that a middle-aged man who seduced a third-year undergraduate would be guiltless, whereas two boys of sixteen behaving immorally together would both be committing a crime. That they would either of them be guilty of the still more serious offence of indecent assault, if they had sexual relations with a boy of fifteen, not able in law to give a valid consent, is an almost inevitable result of the necessity of fixing an age of consent; one could hardly have an age of consent varying with that of the other participant. The Committee recommend that prosecutions should not ordinarily be brought against persons under twenty-one for homosexual acts, but there are obvious objections to a criminal law, which is not to be enforced.

So far as offences between adults are concerned, the Committee's suggestions, if adopted, would make less difference in practice than they appear to suppose, for only an infinitesimal proportion of the homosexual acts committed in private ever form the subject of a prosecution. A subsidiary question which the Committee had to face was whether the traditional but illogical distinction between the so-called "abominable crime" and other sexual acts should be preserved; and they decided on its abolition except in the case of offences against young boys.

There is one recommendation by the Committee with which no reasonable person

can disagree, that is the granting to male persons accused of importuning the right to trial by jury, which is possessed by those accused of any other crime of any gravity.

Those who only know about the Wolfenden Committee from the notices which have appeared in the newspapers will not realize the enormous amount of work they have put into the consideration of other matters than mere reforms in the criminal law, such as schemes for the treatment and reform of homosexual offenders and the discouragement of others from imitating them. This is all however wasted labour, as must be all schemes for moral reform in an age in which the religious basis of morality has collapsed. They cannot explain why homosexual conduct is wrong, let alone convince others of it.

They are on much firmer ground in dealing with the other subject of their report, prostitution. This is a police matter. Prostitutes, like motor-cars, must be controlled to make the streets of London tolerable and this problem scarcely raises any ethical questions, however much or however little one dislikes or disapproves of prostitution. The Committee accept that the abolition of prostitution by law is neither consistent with general principles, nor is it enforceable; but their proposals for alterations in the existing law regulating it will commend themselves to all reasonable people especially those familiar with the Metropolitan magistrates' courts.

They suggest that it should no longer be necessary to prove that a prostitute has caused annoyance by soliciting. This is abolishing a legal fiction; as no member of the public ever comes forward as a witness in these cases, the existing practice is for a policeman to state in evidence, "She spoke to three gentlemen; they appeared to be annoyed." The Committee also propose an increase of penalties. The present fine of forty shillings was, even before the recent depreciation of the currency, quite inadequate, and its continual imposition made it look like a licence fee or purchase tax on prostitutes. If it is really desired to suppress soliciting, the court should have the power to pass a sentence of imprisonment, if necessary, as well as to impose a serious fine.

The Committee recognize that driving prostitutes off the streets will cause them to carry on their trade elsewhere: but this is no argument, if it be accepted that the province of the law is to suppress, not immorality, but public annoyance. They reject unhesitatingly the proposal to establish licensed brothels, which have been abolished even in the countries where they previously existed.

The Committee set out in detail and very clearly the present law regarding procurement of women and living on their immoral earnings. Such laws are not easy of enforcement; so long as prostitution exists there will be men and a few women exploiting it. The Committee point out that the men, who actually live with and on prostitutes, are often the one element of stability in their lives; the highly organized exploiters of sex are largely the creation of popular fiction; but there are a number of persons who get excessive rents or premiums from property used for prostitution without falling within the present law, as became evident in some recent cases; and on this point they make some useful proposals for reform. They are concerned to consider also ways to prevent girls becoming prostitutes or to reform those who have done so, but this is a far more difficult undertaking than alterations in the law as to real property.

So far there is little sign of any action being taken to implement the recommendations of this important Committee, the reasons for which are obvious. It is unfortunate that they had put before them two different subjects, since it may be difficult to adopt one half and ignore the other half of their recommendations. Nevertheless, it seems probable that those as to prostitution, which are scarcely controversial, will be put into effect, but that no change will be made in the law as to homosexuality, except, it is to be hoped, to give a right of trial to those accused of importuning. This may be regarded as the point at which the two fields of discussion overlap, though many of those accused of importuning, particularly those whose cases attract most attention, are doing it for pleasure and not for money.

### American Research into Population and Resources

SUMMARIES of the papers delivered at the 1957 meeting of the Population Association of America appear in a recent issue of *Population Index*\*—a journal of considerable value to demographers all over the world for its comprehensive list of current writings and authors, its up-to-date tables and diagrams and its original articles and commentaries.

Two of the papers are of special interest in connection with a new form of enquiry that is just beginning and is likely to prove of great significance in coming decades: the investigation of the ways in which changing populations and developing resources influence and interact with one another. Since the time of Malthus, and even before, assumptions have been made about the effect of increasing numbers upon, for instance, the amount of food available per head. Only recently has there been both the determination to ascertain the facts without theoretical preconceptions and the capacity to approach them by empirical means.

Attention had been drawn in the columns of recent numbers of the REVIEW to the reports of the United Nations Food and Agriculture Organization.† The data they have presented have shown a sombre picture but by no means one without hope. Professor Stolnitz's paper, entitled "Interrelations between Economic Development Levels of Living and Demographic Trends," notes that food supply *per capita* appeared by 1955 to have recovered to pre-war levels in the Far East and Latin America, in spite of population growth rates of up to 2 or even 3 per cent per year, and to have exceeded those levels in much of Africa and the Middle East. He asks whether a favourable trend may be expected to continue, and criticizes the demographic method, now rapidly becoming old-fashioned, of supposing that what is known to have happened in one country in the past may be assumed to occur in another, quite different, sort of country in

\* July, 1957. 23, 3.

† A notice of *The State of Food and Agriculture 1957* appears on p. 209 of this issue.

the future. It does not appear from the author's summary that he has made a precise formulation of the type of research that is now needed in order to clarify the prospects, or has provided specific suggestions on the ascertainment of what really is going to happen; it may be, however, that when the complete script is available it will be found that he has shed some new light on this tough problem.

The elusive nature of demographic trends is illustrated by Professor Stolnitz's remark that "it is probably too late to make satisfactory assessment of the factors underlying the turn in Western fertility since the War." Only recently, investigators considered it too *early* to make the assessment. Perhaps the causes of the next demographic revolution will be more apparent at some time during or after its occurrence?

Some more definite proposals for research appear to have been made by Mr. Joseph Fisher, in a contribution entitled "Demographic, Economic and Policy Factors in Research on Resources for the Future." According to the author's own summary, he has sketched by means of a few statistics the major changes in absolute and *per capita* consumption of renewable and non-renewable resources in the United States between 1900 and 1952, and has considered the future of that country in the light of this analysis. In his view much will depend on the taking of more rational decisions and the formulation of more far-sighted policies to meet problems posed by conflicting trends of population and resources. He considers, therefore, that government action and the deliberations of business managements and labour organizations are all-important and should be brought within the scope of demographic enquiry.

In the last part of Mr. Fisher's paper, "two examples are presented to show more concretely how a better understanding of the requirements of policy and decision-making can appropriately influence the formulation of research projects and the presentation of research findings. The first example concerns agricultural and land-use adjustment in much of the rural South; the second concerns

the meeting of rapidly increasing United States and world demand for petroleum supplies." In each case the relevance of demographic and economic research for policy and decision is stressed.

Among many other interesting contributions to the Meeting, a series of papers dealing not only with the probable size of the United States population in 1975 but also with its distribution is worthy of note. Questions of colour, place of birth, type of residence, size of cities, farm population, journey to work, traffic fatalities, school enrolment, the burden of old-age and a number of other features of life as it may be twenty years hence are all dealt with in considerable detail.

### A Gene in Action

DR. HERMANN LEHMANN writes: Sick-cell anæmia has attracted the interest of geneticists for some time because it is a human disease where perhaps for the first time the disorder could be traced to a change in one particular protein molecule. The inheritance of this molecule was shown to be determined by a single dominant gene. It was found that the homozygote for the sickling gene possessed sickle-cell hæmoglobin whereas the normal individual possesses normal adult hæmoglobin. In the heterozygote a mixture of both sickle-cell hæmoglobin and normal adult hæmoglobin are present. Thus Pauling and his collaborators who were the first to show that the hæmoglobin of the sickle-cell anæmia patient was different from normal, entitled their communication "Sickle-cell anæmia, a molecular disease." Recent work by Dr. V. M. Ingram at the Cavendish Laboratory in Cambridge has pursued the action of a single gene further by demonstrating the particular difference between the sickle-cell hæmoglobin and normal adult hæmoglobin. He partially digested both hæmoglobins with a proteolytic enzyme and obtained an identical number of about thirty peptide-chains from both. Each chain consisted of about a dozen amino-acids. In the sickle-cell hæmoglobin digest, one chain carried a positive charge at pH 4 whereas its equivalent in the normal hæmoglobin digest

was uncharged. This suggested that the difference between the two molecules was not in the folding or construction of the polypeptide-chains but in the sequence of the amino-acids in one part of one of the polypeptide chains. By further investigation of the two critical chains, Dr. Ingram was able to pin down the difference. Each chain contained nine amino-acids of which eight were the same in both, and one different. In sickle-cell hæmoglobin the amino-acid valine took the place of a glutamic acid in the same position in the normal hæmoglobin. Recently, another abnormal hæmoglobin—hæmoglobin C—has been examined by Dr. Ingram. Again the only difference between this hæmoglobin and the two others consisted in the one amino-acid in this particular polypeptide-chain which in the case of hæmoglobin C was lysine. As the formation of these hæmoglobins is due to the mutation of a single gene, one must visualise gene action as affecting this particular aspect of hæmoglobin synthesis.

The inheritance of characters is carried from generation to generation in the chromosomes which form the nuclei of the germ cells. These chromosomes are sequences of nucleic acids and the genes are thought to be nucleic acids which are self replicating and which either directly or indirectly determine the structure of the protein for which they are responsible. A mutation must then be a minute change in one nucleic acid.

Dr. Ingram's work is as yet the nearest approach to demonstrating a gene in action.

### **“Marx versus Malthus”**

IN the *Population Review*\* from India there is an article by Professor W. Petersen, of the University of Colorado, which contributes a scholarly discussion of the rival views of Malthus and Marx. It begins by quoting from various recent Russian writings about Malthus, mostly involving abuse of Western writers in such extreme forms, that it becomes quite amusing. The article then goes on to compare the views expressed by the two men,

in respect of which Marx of course had one great advantage through living later, so that he could study Malthus's writings.

As is often the case in such matters, there is more agreement between the views of two great men than their later disciples quite like to see. There is of course the difference between them that Malthus was for the most part a learned scholar, whereas Marx in addition to his great learning was also a prophet. It thus proves that in some of his writings, after first accepting the reasonableness of some of Malthus's views, he later perceives that they will contradict some part of the creed he is preaching, and so he turns against them.

### **“Safe Period” Conception Control**

DR. SYLVIA DAWKINS writes: The use of the so called “safe period,” or rhythm method for the control of conception depends on the principle of restricting sexual intercourse to the pre-ovular and post-ovular days in the menstrual cycle, with abstinence during the fertile days when ovulation occurs. Ovulation is assumed to take place during the middle week of the cycle, about fifteen days before the onset of the next menstrual period.

For the purpose of calculating the fertile days Farris has postulated that if the average length of the cycle be divided by two, and two days subtracted from this result, this day and the two following can be taken as the ovulatory days. The addition of one or two days before and after will allow for variations in the length of the menstrual cycle. An indication of the days of ovulation can be obtained from a record of the basal temperature, taken by the woman, orally, immediately on waking, which shows a biphasic pattern when ovulation is occurring. The rise in temperature from the lower level of the first phase, to the higher level of the second phase, indicates the end of ovulation. However, the keeping of such temperature records for prolonged periods is tedious to the patient, and can even, at times, prove misleading.

The “safe period” method of contraception is found to be unreliable owing to the unpredictable variations that occur in the

\* July, 1957. 1, 2.

length of the menstrual cycle, which can be affected by a variety of physical and emotional factors. It is obviously impossible to make any reliable calculations for some months after child-birth, or during the menopause. A further difficulty is due to the variations in the viability of the spermatozoa, considerably longer periods than the generally accepted forty-eight hours have been reported by a number of observers. This makes the estimations of the safe pre-ovular days in the cycle unreliable, with the result that the number of days in the cycle which may be regarded as safe are often very few. In addition to this limitation in frequency of intercourse, the inevitable lack of spontaneity may make this method very disturbing to the marital relationship, and therefore unacceptable. There are, however, many couples for whom this is the only method permitted by their religious principles.

The C.D. (Conception Days) Indicator is a mechanical device whereby the fertile days in the month can be calculated with accuracy, allowance being made for considerable variations in the menstrual cycle. The only cases for which it is not applicable are those where the cycles are shorter than twenty-one days, or longer than thirty-eight or those with more than twelve days variation between the longest and shortest cycles. For those who find a ready reckoner helpful and who wish to use the safe period method in spite of the inevitable drawbacks and unreliability, the C.D. Indicator will no doubt be of great help.

### U.S.S.R. and the Family—A Correction

THE alleged change of attitude in the U.S.S.R. towards the family contained in the speech of N. S. Khrushchov at the 20th Congress of the Communist Party of the Soviet Union, and noted in the July 1957 issue of THE EUGENICS REVIEW, was of such a far-reaching nature that it called for further investigation.

A member of the *Society* very kindly made available a copy of the relevant Report of the Central Committee (*Soviet News Booklet* No. 4) and it is only fair to say that no indication whatever is contained in this

Report to justify a belief that children are to be compulsorily removed from their families and placed into State Kindergarten, Boarding Schools, etc. Indeed, the emphasis is placed on "only at the request of their parents" (p. 64) and "accommodation for all children of nursery and pre-school age whose parents want it." (p. 65.).

A copy of the relevant issue of *L'Enfance dans le Monde* has been ordered but has not yet come to hand.

### Our Contributors

G. W. BARTHOLOMEW, B.Sc.(Econ.), LL.B.  
MR. G. W. BARTHOLOMEW, who is now Lecturer in Law at the University of Tasmania, studied at the University of London and was called to the Bar, Gray's Inn, in 1951. His previous appointments include a part time lectureship in Law at the South West Essex Technical College, and he was Assistant Lecturer in Law at the School of Oriental and African Studies, University of London, from 1950 to 1954.

P. R. COX, F.I.A., F.S.S.

MR. PETER COX contributed to the January 1955 number of the REVIEW, where a biographical note may be found on p. 201.

JOHN D. NISBET, M.A., B.ED., PH.D.

DR. NISBET contributed to the July 1955 number of the REVIEW, where a biographical note may be found on p. 78.

R. A. PILKINGTON, M.C., M.P.

CAPTAIN RICHARD PILKINGTON, who was educated at Charterhouse and Oxford, has been Conservative M.P. for Poole since 1951, and represented Widnes from 1935 to 1945. He served in the Coldstream Guards from 1930 to 1935 and from 1939 to 1942 and was Civil Lord of the Admiralty from 1942 to 1945.

MRS. M. A. PYKE.

MRS. MARGARET PYKE was educated at a private school and at Somerville College, Oxford. Now Chairman of the Family Planning Association, she was its General Secretary from 1930 to 1938. Mrs. Pyke is

a member of the Council of the *Eugenics Society* and of the Governing Body of the International Planned Parenthood Federation.

R. E. S. TANNER.

AFTER service in both Burma and Colonial Administration Services, MR. R. E. S. TANNER received a Diploma in Anthropology at Oxford and is at present serving in Tanganyika. He has contributed a number of papers on sociological subjects to journals in America, Africa and England.

### OBITUARY

**Julius Isaac, Ph.D.**

It is with great regret that we record

the death in a road accident on October 20th, 1957 of DR. JULIUS ISAAC in his 63rd year.

Dr. Isaac was well known for his studies on migration and his writings include *Economics of Migration*, published in 1947, and *British Post-War Migration*, which appeared in 1954, and was the outcome of work done between 1948 and 1952 when he was Research Associate at the National Institute of Economic and Social Research.

Dr. Isaac was elected a Fellow of the Eugenics Society in 1943 and the book reviews which he contributed to THE EUGENICS REVIEW have always been greatly appreciated.

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# EUGENICS QUARTERLY

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